IT

Indirect calorifier

IT - 300/400/500/600/750/1000
IT - 1500/2000/2500/3000



Indirect water heater (calorifier) for a wide range of applications • Single-wall spiral heat exchanger • PermaGlas Ultra Coat second-generation glass coating technology prevents corrosion • IT 300: Three adjustable legs facilitate easy installation • IT 400-1000: Insulated ring base • Insulated access cover for comprehensive waterside maintenance • Replaceable magnesium anode • Options: Flexible magnesium anode for installation in confined areas • Powered anode for reduced maintenance requirements • Temperature and pressure valve with stainless steel spring set to 95 °C and a maximum water pressure of 7 bar • Analogue temperature gauge (0-120 °C) • Electric element heat packs (3 - 36 kW) • Optional ancillaries: unvented kits • Destratification pump kit

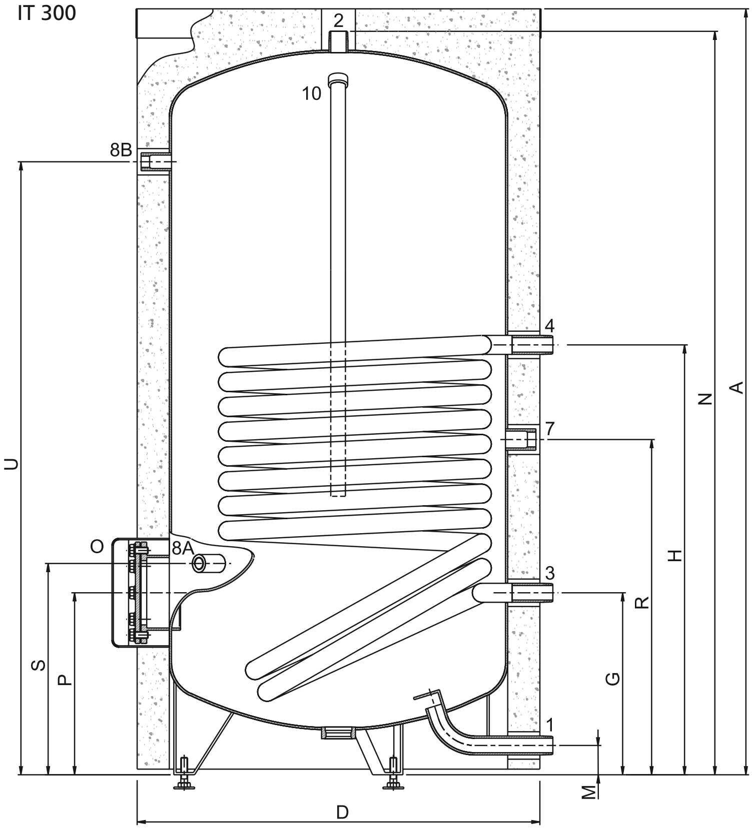
Innovation has a name.

Technical specifications

		IT 300	IT 400	IT 500	IT 600	IT 750	IT 1000	IT 1500	IT 2000	IT 2500	IT 3000
Technical data											
Output coil	kW	46	78	100	104	112	145	134	134	142	142
Surface area coil	m²	1.47	2.45	3.11	3.45	3.72	4.82	5,2	5,2	6	6
Water capacity coil	l	8.9	14.8	18.8	29.3	31.6	40.9	40	40	45	45
Flow rate coil (80-60°C)	l/h	1978	3345	4300	4472	4816	6235	5762	5762	6106	6106
Pressure drop coil	mbar	56	244	489	104	128	259	158	158	174	174
Maximum working pressure tank	bar	10	10	10	10	10	10	8	8	8	8
Maximum working pressure coil	bar	16	16	16	16	16	16	6	6	6	6
Maximum operating temperature tank	°C	95	95	95	95	95	95	85	85	85	85
Maximum operating termperature coil	°C	110	110	110	110	110	110	90	90	90	90
Standby loss	kWh/24h	1.32	1.60	1.88	1.85	2.03	2.19	5.40	7.20	8.50	9.60
Anodes	-	1	1	1	1	1	1	3	3	3	3
Maximum weight	kg	413	524	653	884	979	1343	1948	2226	3126	3400
Draw-off capacity											
Storage capacity	l	296	385	473	643	725	1007	1550	1800	2550	2800
30 min. ΔT=44°C	l	728	1106	1396	1616	1776	2374	2870	3142	4031	4304
60 min. ΔT=44°C	l	1177	1868	2373	2633	2871	3791	4176	4452	5419	5691
90 min. ΔT=44°C	l	1627	2631	3350	3649	3965	5208	5489	5761	6806	7079
120 min. ΔT=44°C	l	2076	3393	4327	4665	5060	6625	6798	7071	8194	8467
Continuous ΔT=44°C	l/h	899	1525	1955	2033	2189	2834	2619	2619	2775	2775
Heating-up time ΔT=44°C	min.	20	15	15	19	20	21	36	41	55	61
30 min. ΔT=50°C	l	640	973	1228	1422	1563	2089	2525	2765	3547	3787
60 min. ΔT=50°C	l	1036	1644	2088	2317	2526	3336	3678	3918	4768	3918
90 min. ΔT=50°C	l	1431	2315	2948	3211	3489	4583	4830	5070	5990	6230
120 min. ΔT=50°C	l	1827	2986	3808	4105	4453	5830	5982	6222	7211	7451
Continuous ΔT=50°C	l/h	791	1342	1720	1789	1926	2494	2305	2305	2442	2442
Heating-up time ΔT=50°C	min.	22	17	16	22	23	24	40	47	63	69
30 min. ΔT=55°C	l	582	885	1116	1293	1421	1899	2296	2514	3225	3443
60 min. ΔT=55°C	l	942	1495	1898	2106	2296	3033	3343	3561	4335	4553
90 min. ΔT=55°C	l	1301	2104	2680	2919	3172	4166	4391	4609	5445	5663
120 min. ΔT=55°C	l	1661	2714	3462	3732	4048	5300	5439	5657	6555	6773
Continuous ΔT=55°C	l/h	719	1220	1564	1626	1751	2267	2095	2095	2220	2220
Heating-up time ΔT=55°C	min.	25	19	18	24	25	27	44	52	69	76
Shipping data											
Weight empty	kg	117	139	180	241	254	336	398	426	576	600
Weight incl. packaging	kg	128	153	201	251	260	348	488	526	686	720
Width packaging	mm	780	780	780	870	870	1010	1170	1170	1498	1498
Height packaging	mm	1510	1850	2150	1930	2150	2100	2060	2248	2120	2195
Depth packaging	mm	780	780	780	870	870	1010	1426	1426	1680	1680

Dimensions

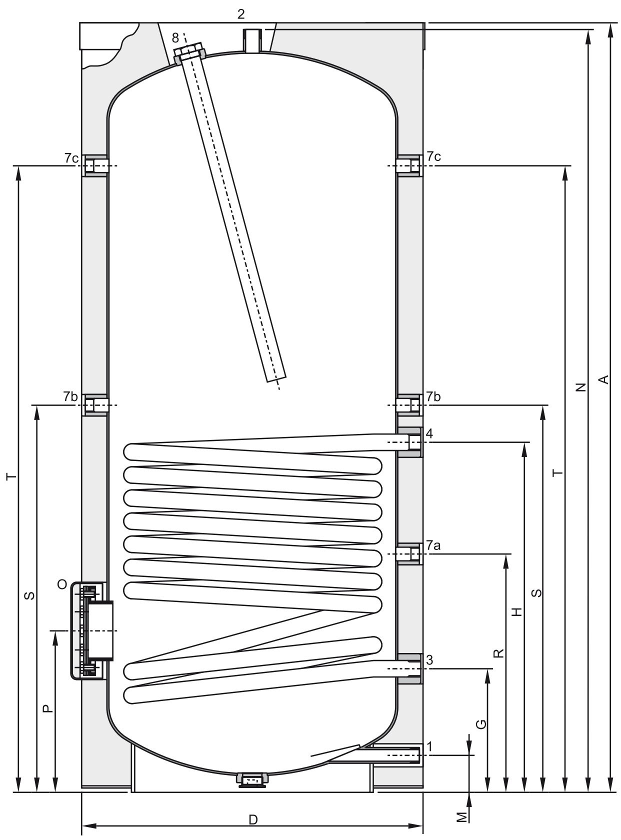
IT 300



		IT 300	IT 400	IT 500	IT 600	IT 750	IT 1000
A		1370	1705	2040	1835	2030	2000
D		720	720	720	910	910	1060
G		325	255	255	305	305	345
H		765	1010	1205	1145	1205	1305
M		75	70	70	85	85	95
N		1310	1650	1990	1795	1990	1960
O		115	115	115	180	180	180
P		325	330	330	415	415	445
R		595	500	500	650	650	700
S		375	1095	1290	1235	1295	1395
T		-	1360	1700	1475	1670	1600
U		1115	-	-	-	-	-
1	Cold water	R1	R2	R2	R2½	R2½	R2½
2	Hot water	R1	R2	R2	R2½	R2½	R2½
3	Inlet coil	Rp1	Rp1	Rp1	Rp1	Rp1¼	Rp1¼
4	Outlet coil	Rp1	Rp1	Rp1	Rp1	Rp1¼	Rp1¼
7	Connection	Rp¾	Rp¾	Rp¾	Rp¾	Rp¾	Rp¾
8 a/b	Connection immersion well	Rp½	-	-	-	-	-
8	Anode connection	-	Rp1¼	Rp1¼	Rp1¼	Rp1¼	Rp1¼
10	Anode connection	R1	-	-	-	-	-

Dimensions in mm. All IT calorifiers receive a three years warranty on the tank and one year on parts.

IT 400-1000

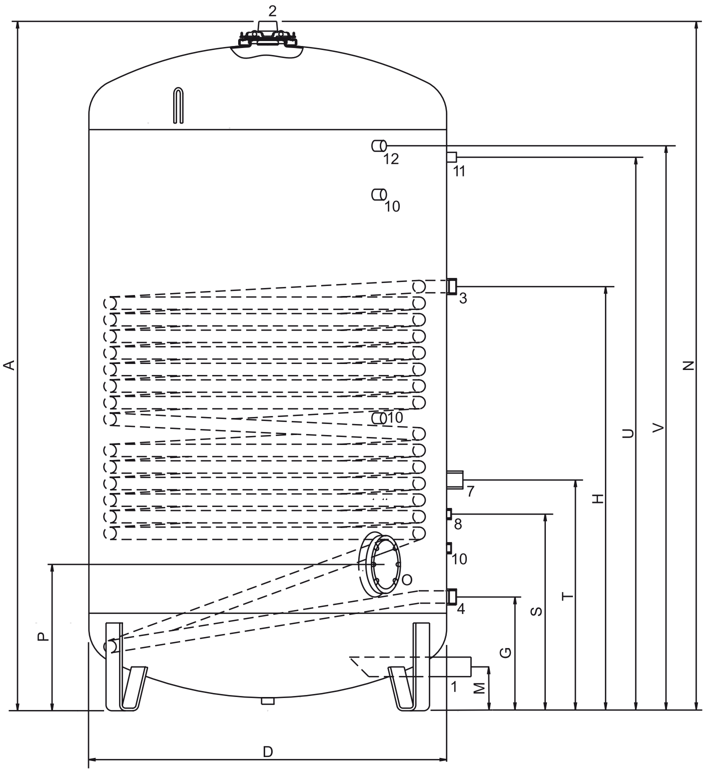




IT

Dimensions

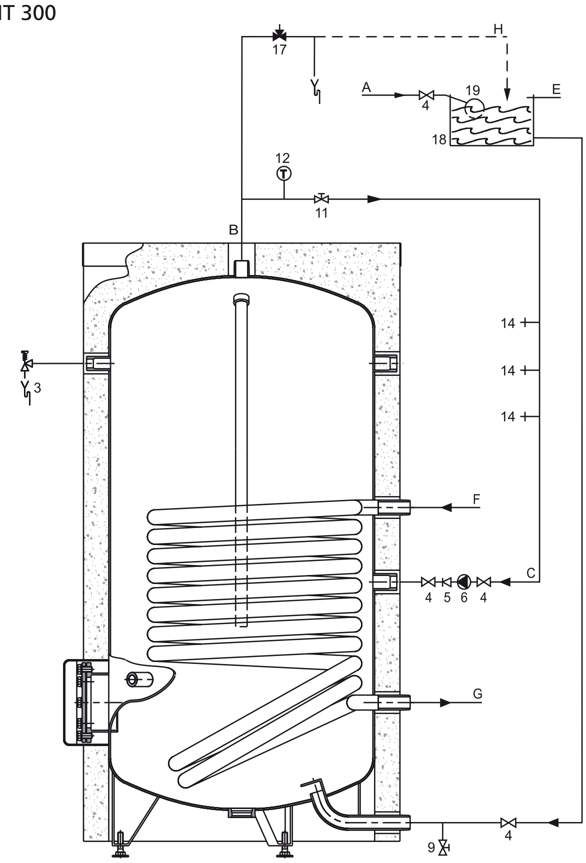
IT 1500-3000



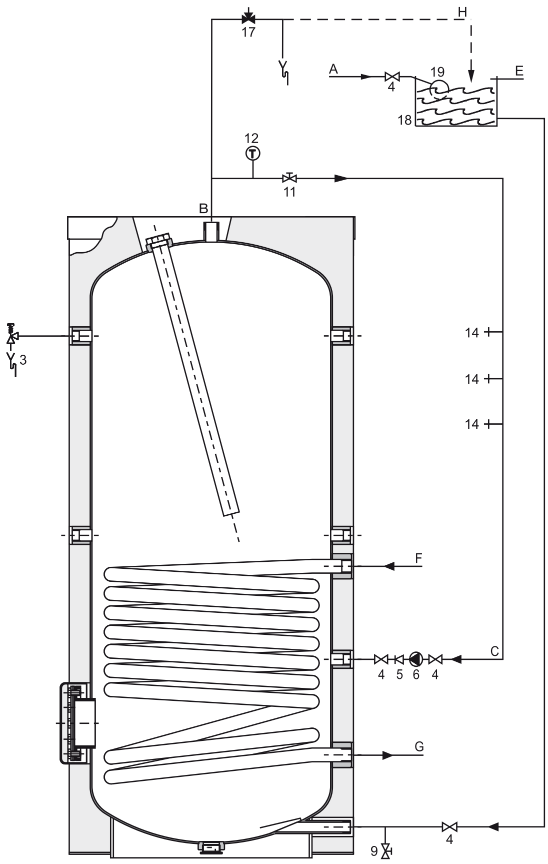
		IT 1500	IT 2000	IT 2500	IT 3000
A		1880	2068	1939	2068
		1880	2068	1939	2068
D		1100	1100	1400	1400
		1200	1200	1500	1500
G		350	350	430	430
H		1305	1305	1283	1283
M		135	135	183	183
N		1930	2118	1989	2118
O		180	180	180	180
P		425	425	510	510
R1		500	500	580	580
R2		950	950	982	982
R3		1400	1588	1430	1559
S		605	605	685	685
T		710	710	790	790
U		1515	1703	1530	1624
V		1550	1738	1530	1659
1	Cold water	R 2	R 2	R 2	R 2
2	Hot water	R 2	R 2	R 2	R 2
3	Inlet coil	Rp 1¼	Rp 1¼	Rp 1¼	Rp 1¼
4	Outlet coil	Rp 1¼	Rp 1¼	Rp 1¼	Rp 1¼
7	Connection	Rp 1¼	Rp 1¼	Rp 1¼	Rp 1¼
8	Connection immersion well	Rp ¾	Rp ¾	Rp ¾	Rp ¾
10	Anode connection	Rp ¾	Rp ¾	Rp ¾	Rp ¾
11	Service valve	Rp 1	Rp 1	Rp 1	Rp 1
12	Temperature meter	Rp ¾	Rp ¾	Rp ¾	Rp ¾

Installation diagrams

IT 300



IT 400-1000



2 Protected cold supply setup
3 T&P valve
4 Stop valve
5 Non-return valve
6 Circulation pump

A Cold water
B Hot water
C Return circulation
F Primary flow
G Primary return

The IT 300 and 400-1000 is also available in unvented version.

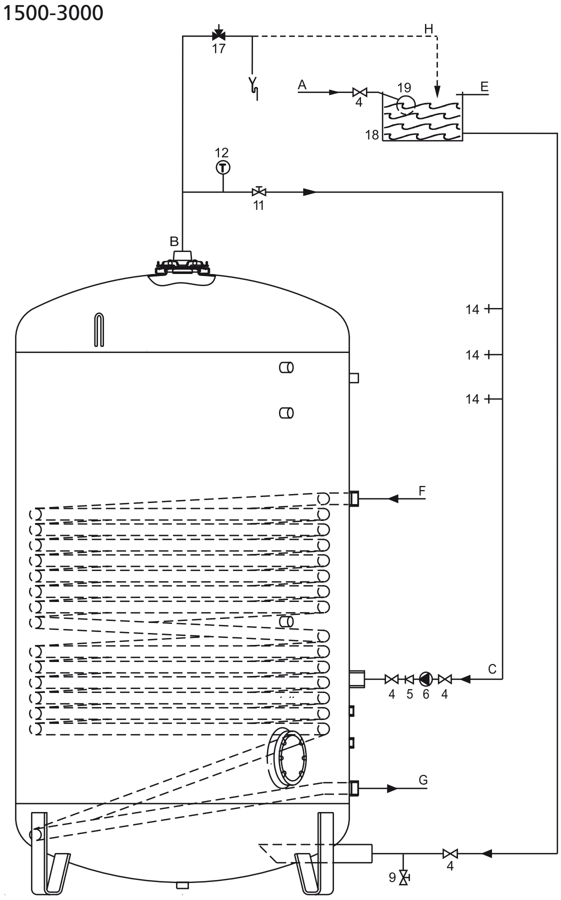
A.O. Smith unvented system kits utilise combination valves.

Further installation and connection details can be found in the Installation & Commissioning Manual.

For the parts numbers of components please refer to the "Maintenance and accessories" chapter.

Installation diagrams

IT 1500-3000



3 T&P valve
4 Stop valve
5 Non-return valve
6 Circulation pump
9 Drain valve
11 Isolating valve
12 Temperature gauge
14 Hot water outlets
17 Three way valve
18 Water tank
19 Float valve

A Cold water
B Hot water
C Return circulation
F Primary flow
G Primary return
E Over flow pipe
H Expansion vent pipe

The IT 1500-3000 is also available in unvented version.

A.O. Smith unvented system kits utilise combination valves.

Further installation and connection details can be found in the Installation & Commissioning Manual.

For the parts numbers of components please refer to the "Maintenance and accessories" chapter.

Data subject to change INT/1108/IT/02
Terms and conditions apply, please refer to our website.